#### APPENDIX II:

#### THE AMENDED CLAIMS (clean version):

(amended) A 3-heterocyclyl-substituted benzoyl compound of formula

where the variables have the following meanings:

- $R^1$ ,  $R^2$  are hydrogen, nitro, halogen, cyano,  $C_1$ - $C_6$ -alkyl,  $C_1$ - $C_6$ -haloalkyl,  $C_1$ - $C_6$ -alkoxy,  $C_1$ - $C_6$ -haloalkoxy,  $C_1$ - $C_6$ -alkylthio,  $C_1$ - $C_6$ -haloalkylthio,  $C_1$ - $C_6$ -alkylsulfinyl,  $C_1$ - $C_6$ -haloalkylsulfonyl;
- $R^3$  is hydrogen, halogen or  $C_1$ - $C_6$ -alkyl;
- $R^4$ ,  $R^5$  are hydrogen, halogen, cyano, nitro,  $C_1$ - $C_4$ -alkyl,  $C_1-C_4-alkoxy-C_1-C_4-alkyl$ ,  $di(C_1-C_4-alkoxy)-C_1-C_4-alkyl$ ,  $di(C_1-C_4-alkyl)-amino-C_1-C_4-alkyl$ , [2,2-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-1-hy $drazino]-C_1-C_4-alkyl$ ,  $C_1-C_6-alkyliminooxy-C_1-C_4-alkyl$ ,  $C_1-C_4-alkoxycarbonyl-C_1-C_4-alkyl$ ,  $C_1-C_4-alkyl$ thio- $C_1-C_4-alkyl$ ,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -cyanoalkyl,  $C_3-C_8-cycloalkyl$ ,  $C_1-C_4$ -alkoxy,  $C_1-C_4$ -alkoxy- $C_2-C_4$ -alkoxy,  $C_1-C_4$ -haloalkoxy, hydroxyl, C<sub>1</sub>-C<sub>4</sub>-alkylcarbonyloxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-haloalkylthio,  $di(C_1-C_4-alkyl)$ amino,  $COR^6$ , phenyl or benzyl, it being possible for the two last-mentioned substituents to be fully or partially halogenated and/or to have attached to them one to three of the following groups: nitro, cyano,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -alkoxy or  $C_1-C_4$ -haloalkoxy;
- $R^4$  and  $R^5$  together form a  $C_2$ - $C_6$ -alkanediyl chain which can be mono- to tetrasubstituted by  $C_1$ - $C_4$ -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl; or
- R<sup>4</sup> and R<sup>5</sup> together with the corresponding carbon form a carbonyl or thiocarbonyl group;
- R<sup>6</sup> is hydrogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy,  $C_1$ - $C_4$ -alkoxy- $C_2$ - $C_4$ -alkoxy,  $C_1$ - $C_4$ -haloalkoxy,  $C_3$ - $C_6$ -alkenyloxy,  $C_3$ - $C_6$ -alkynyloxy or NR<sup>7</sup>R<sup>8</sup>;

 $R^7$  is hydrogen or  $C_1-C_4$ -alkyl;

 $R^8$  is  $C_1-C_4$ -alkyl;

X is O, S,  $NR^9$ , CO or  $CR^{10}R^{11}$ ;

Y is 0, S, NR<sup>12</sup> or CO;

 $R^9$ ,  $R^{12}$  are hydrogen or  $C_1-C_4$ -alkyl;

 $R^{10}$ ,  $R^{11}$  are hydrogen,  $C_1$ - $C_4$ -alkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy-carbonyl,  $C_1$ - $C_4$ -haloalkoxycarbonyl or  $CONR^7R^8$ ; or

 $R^4$  and  $R^9$  or  $R^4$  and  $R^{10}$  or  $R^5$  and  $R^{12}$  together form a  $C_2$ - $C_6$ -alkanediyl chain which can be monot to tetrasubstituted by  $C_1$ - $C_4$ -alkyl and/or interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl;

 ${\sf R}^{\sf 15}$  is a pyrazole of the formula II which is linked in the 4-position

where

 $R^{16}$  is  $C_1-C_6$ -alkyl;

Z is H or  $SO_2R^{17}$ ;

 $R^{17}$  is  $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl, phenyl or phenyl which is partially or fully halogenated and/or has attached to it one to three of the following groups: nitro, cyano,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -alkoxy or  $C_1-C_4$ -haloalkyl,  $C_1$ - $C_4$ -haloalkyl,  $C_1$ - $C_4$ -alkoxy;

 $R^{18}$  is hydrogen or  $c_1-C_6$ -alkyl;

where X and Y are not simultaneously sulfur;

with the exception of

4-[2-chloro-3-(4,5-dihydrothiazol-2-yl)-4-methylsulfonylbenzoyl]-

-1,3-dimethyl-5-hydroxy-1H-pyrazole and

4-[2-chloro-3-(thiazoline-4,5-dione-2-yl)-4-methylsulfonylbenzo-

yl]-1,3-dimethyl-5-hydroxy-1H-pyrazole;

or an agriculturally useful salt thereof.

2. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I where the variables have the following meanings:

- R1, R2 are hydrogen, nitro, halogen, cyano, C1-C6-alkyl, C1-C6-haloalkyl,  $C_1-C_6$ -alkoxy,  $C_1-C_6$ -haloalkoxy,  $C_1-C_6$ -alkylthio,  $C_1-C_6$ -haloalkylthio,  $C_1-C_6$ -alkylsulfinyl,  $C_1-C_6$ -haloalkylsulfinyl, C<sub>1</sub>-C<sub>6</sub>-alkylsulfonyl or C<sub>1</sub>-C<sub>6</sub>-haloalkylsulfonyl;
- $R^3$  is hydrogen, halogen or  $C_1-C_6$ -alkyl;
- R<sup>4</sup>, R<sup>5</sup> are hydrogen, halogen, cyano, nitro,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -alkoxy- $C_1-C_4$ -alkyl,  $di(C_1-C_4-alkoxy)-C_1-C_4-alkyl$ ,  $di(C_1-C_4-alkyl)-amino-C_1-C_4-alkyl$ , [2,2-di(C<sub>1</sub>-C<sub>4</sub>-alkyl)-1-hy $drazino]-C_1-C_4-alkyl$ ,  $C_1-C_6-alkyliminooxy-C_1-C_4-alkyl$ ,  $C_1-C_4-alkoxycarbonyl-C_1-C_4-alkyl$ ,  $C_1-C_4-alkyl$ thio- $C_1-C_4-alkyl$ ,  $C_1-C_4$ -cyanoalkyl,  $C_1-C_4$ -haloalkyl,  $C_3-C_8$ -cycloalkyl,  $C_1-C_4-alkoxy-C_2-C_4-alkoxy$ ,  $C_1-C_4$ -haloalkoxy,  $C_1-C_4-alkoxy$ ,  $C_1-C_4$ -alkylthio,  $C_1-C_4$ -haloalkylthio,  $di(C_1-C_4$ -alkyl)amino, COR6, phenyl or benzyl, it being possible for the two lastmentioned substituents to be fully or partially halogenated and/or to have attached to them one to three of the following nitro,  $C_1-C_4-alkyl$ , groups: cyano,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -alkoxy or  $C_1-C_4$ -haloalkoxy; or
- $R^4$  and  $R^5$  together form a  $C_2-C_6$ -alkanediyl chain which can be mono- to tetrasubstituted by C1-C4-alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by C1-C4-alkyl; or
- R4 and R5 together with the corresponding carbon form a carbonyl or thiocarbonyl group;
- R6 is  $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -alkoxy,  $C_1-C_4$ -alkoxy- $C_2-C_4$ -alkoxy,  $C_1-C_4$ -haloalkoxy,  $C_3-C_6$ -alkenyloxy,  $C_3-C_6$ -alkynyloxy or NR7R8;
- is hydrogen or  $C_1-C_4$ -alkyl;  $\mathbb{R}^7$
- $R^8$  is  $C_1-C_4$ -alkyl;
- is O, S, NR9, CO or CR10R11; X
- is O, S, NR12 or CO;
- $R^9$ ,  $R^{12}$  are hydrogen or  $C_1-C_4$ -alkyl;
- $R^{10}$ ,  $R^{11}$  are hydrogen,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -alkoxycarbonyl, C<sub>1</sub>-C<sub>4</sub>-haloalkoxycarbonyl or CONR<sup>7</sup>R<sup>8</sup>; or
- $R^4$  and  $R^9$  or  $R^4$  and  $R^{10}$  or  $R^5$  and  $R^{12}$  together form a  $C_2-C_6$ -alkanedivl chain which can be mono- to tetrasubstituted by C<sub>1</sub>-C<sub>4</sub>-alkyl and/or interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by C<sub>1</sub>-C<sub>4</sub>-alkyl;

 $R^{15}$  is a pyrazole of the formula II which is linked in the 4-position

where

 $R^{16}$  is  $C_1-C_6$ -alkyl;

is H or  $SO_2R^{17}$ ;

R17 is C1-C4-alkyl, C1-C4-haloalkyl, phenyl or phenyl which is partially or fully halogenated and/or has attached to it one to three of the following groups: nitro, cyano,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -alkoxy or  $C_1-C_4$ -haloal-

 $R^{18}$  is hydrogen or  $c_1-C_6$ -alkyl;

where X and Y are not simultaneously sulfur;

with the exception of

4-[2-chloro-3-(4,5-dihydrothiazol-2-yl)-4-methylsulfonylbenzoyl]--1,3-dimethyl-5-hydroxy-1H-pyrazole and

4-[2-chloro-3-(thiazoline-4,5-dione-2-yl)-4-methylsulfonylbenzoyl]-1,3-dimethyl-5-hydroxy-1H-pyrazole;

or an agriculturally useful salt thereof.

- 3. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where R3 is hydrogen.
- 4. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where
  - $R^1$ ,  $R^2$  are nitro, halogen, cyano,  $C_1-C_6$ -alkyl,  $C_1-C_6$ -haloalkyl, C1-C6-alkoxy, C1-C6-haloalkoxy, C1-C6-alkylthio, C1-C6-haloalkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylsulfinyl,  $C_1-C_6$ -haloalkylsulfinyl,  $C_1-C_6$ -alkylsulfonyl or  $C_1-C_6$ -haloalkylsulfonyl.
- 5. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where Z is  $SO_2R^{17}$ .
- 6. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where Z is hydrogen.
- 7. (canceled)

- 8. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where
  - $R^4$  is halogen, nitro,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -alkoxy- $C_1-C_4$ -alkyl,  $C_1-C_4$ -alkoxycarbonyl- $C_1-C_4$ -alkyl,  $C_1-C_4$ -alkylthio- $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl, C<sub>1</sub>-C<sub>4</sub>-cyanoalkyl, C3-C8-cycloalkyl,  $C_1-C_4-alkoxy$ ,  $C_1-C_4-alkoxy-C_2-C_4-alkoxy$ ,  $C_1-C_4$ -haloalkoxy,  $C_1-C_4$ -alkylthio,  $C_1-C_4$ -haloalkylthio,  $di(C_1-C_4-alkyl)$ amino, COR6, phenyl or benzyl, it being possible for the two lastmentioned substituents to be partially or fully halogenated and/or to have attached to them one to three of the following nitro, cyano,  $C_1-C_4-a1kyl$ ,  $C_1-C_4-haloalkyl$ ,  $C_1-C_4$ -alkoxy or  $C_1-C_4$ -haloalkoxy;
  - R<sup>5</sup> is hydrogen or C<sub>1</sub>-C<sub>4</sub>-alkyl; or
  - $R^4$  and  $R^5$  together form a  $C_2$ - $C_6$ -alkanediyl chain which can be mono- to tetrasubstituted by  $C_1$ - $C_4$ -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl.
- 9. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where
  - $R^4$  is  $C_1-C_4-alkyl$ ,  $C_1-C_4-haloalkyl$ ,  $C_1-C_4-alkoxycarbonyl$  or  $CONR^7R^8$ ;
  - $R^5$  is hydrogen or  $C_1-C_4$ -alkyl; or
  - $R^4$  and  $R^5$  together form a  $C_2$ - $C_6$ -alkanediyl chain which can be mono- to tetrasubstituted by  $C_1$ - $C_4$ -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl.
- 10. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where  $R^4$  and  $R^5$  are hydrogen.
- 11. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where  $\mathbb{R}^{18}$  is hydrogen.
- 12. (canceled)
- 13. (canceled)
- 14. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where
  - X is S,  $NR^9$ , CO or  $CR^{10}R^{11}$ .

- 15. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where  $R^{18}$  is hydrogen.
- 16. (amended) A 3-heterocyclyl-substituted benzoyl compound of formula I as claimed in claim 1 or 2, where
  - $R^4$  is halogen, cyano, nitro,  $C_1-C_4$ -alkyl,  $C_1-C_4$ -alkoxy- $C_1-C_4$ -al- $C_1-C_4$ -alkoxycarbonyl- $C_1-C_4$ -alkyl, C1-C4-alkylthio- $C_1-C_4$ -alkyl,  $C_1-C_4$ -haloalkyl,  $C_1-C_4$ -cyanoalkyl,  $C_3-C_8$ -cycloalkyl,  $C_1-C_4$ -alkoxy,  $C_1-C_4$ -alkoxy- $C_2-C_4$ -alkoxy,  $C_1-C_4$ -haloalkoxy,  $C_1-C_4$ -alkylthio,  $C_1-C_4$ -haloalkylthio,  $di(C_1-C_4-alkyl)$ amino, COR6, phenyl or benzyl, it being possible for the two lastmentioned substituents to be partially or fully halogenated and/or to have attached to them one to three of the following groups: nitro,  $C_1-C_4$ -haloalkyl, cyano,  $C_1-C_4-alky1$ ,  $C_1-C_4$ -alkoxy or  $C_1-C_4$ -haloalkoxy;
  - $R^5$  is hydrogen or  $C_1-C_4$ -alkyl; or
  - $R^4$  and  $R^5$  together form a  $C_2$ - $C_6$ -alkanediyl chain which can be mono- to tetrasubstituted by  $C_1$ - $C_4$ -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl; or
  - $R^4$  and  $R^9$  or  $R^4$  and  $R^{10}$  or  $R^5$  and  $R^{12}$  together form a  $C_2$ - $C_6$ -alkanediyl chain which can be monoto tetrasubstituted by  $C_1$ - $C_4$ -alkyl and/or which can be interrupted by oxygen or by a nitrogen which is unsubstituted or substituted by  $C_1$ - $C_4$ -alkyl;
  - $R^{18}$  is  $C_1-C_6$ -alkyl.
- 17. (canceled)
- 18. (canceled)
- 19. (canceled)
- 20. (canceled)
- 21. (amended) A composition comprising a herbicidally active amount of at least one 3-heterocyclyl-substituted benzoyl compound of formula I as defined in claim 1 or 2 or of an agriculturally useful salt thereof, and auxiliaries conventionally used for the formulation of crop protection products.
- 22. (amended) A process for the preparation of the composition defined in claim 21, which comprises mixing a herbicidally active amount

- of at least one 3-heterocyclyl-substituted benzoyl compound of formula I or of the agriculturally useful salt thereof and auxiliaries conventionally used for the formulation of crop protection products.
- 23. (amended) A method of controlling undesirable vegetation, which comprises allowing a herbicidally active amount of at least one 3-heterocyclyl-substituted benzoyl compound of formula I as defined in claim 1 or 2 or of an agriculturally useful salt thereof to act on plants, their environment and/or on seeds.

### APPENDIX III:

#### TEST REPORT:

The herbicidal effectivity of the compounds as well as the tolerance of crop plants to treatment with the compounds was investigated in green house experiments as described on page 159, indicated line 14, to page 160, indicated line 9, of the application. The following plants were employed:

Scientific Name	Common Name	
Amaranthus retroflexus	Pigweed	
Chenopodium alba	Lambsquaters	
Echinochloa crus-galli	Barnyardgrass	
Triticum aestivum	Spring wheat	

The compounds were applied post emergence at application rates of 250~g/ha and 125~g/ha of active ingredient. The following compounds served as active ingredients:

## Applicants' compound No. 1b23.18:

# Von Deyn et al.'s compound 1.158:

The results are compiled in the following table which indicated the damage to the treated plants in percent:

	Applicants' compound No. 1b23.18		Compound 1.158 of US 5,846,907	
	250 g/ha	125 g/ha	250 g/ha	125 g/ha
Crop plant:				
Triticum aestivum	0	0	95	85
Unwanted plant:			<b> </b>	
Amaranthus retroflexus	98	95	98	98
Chenopodium alba	98	98	98	98
Echinochloa crus-galli	98	98	98	98

The results of the investigations clearly demonstrate the excellent herbicidal effectivity of the compounds defined in applicants' Claim 1. More particularly, applicants' compound 1b23.18 exhibits an excellent control of unwanted plants and, at the same time, does not harm the crop plant whereas the prior art compound damages the crop plant to almost the same degree as it damages the unwanted plants.